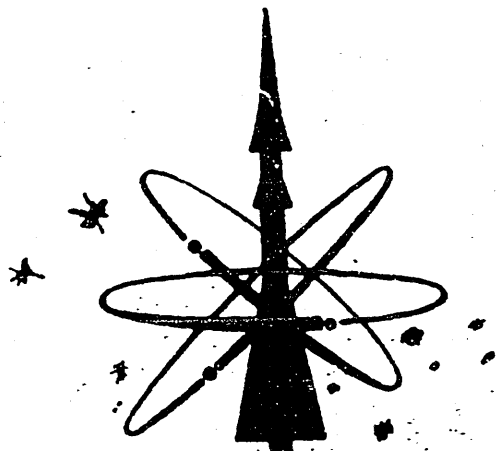
UNCLASSIFIED

[redacted]

AIR TRAINING COMMAND

JUPITER (SM - 78)
MISSILE WEAPON SYSTEM
TRAINING PLAN
1 MAY 1961

(REVISED 15 FEB 1962)



DECLASSIFIED EFFECTIVE 28 June 198
PER ATTACHED HQ ATC/TTOA LETTER,
28 June 1988, MSgt Riggs, 1 Jul 88

SUPERSEDES JUPITER TRAINING PLAN NR II
31 OCTOBER 1960 PREPARED BY

SHEPPARD TECHNICAL TRAINING CENTER
AIR TRAINING COMMAND
SHEPPARD AIR FORCE BASE, TEXAS

UNCLASSIFIED

DOWNGRADED AT 12 YEAR
INTERVALS; NOT AUTOMATICALLY
DECLASSIFIED. DOD DIR 5200.10

Copy ____ OF 118 CYS

[redacted]

24-1257

[redacted]

JUPITER MISSILE FACT SHEET

		Long Range	Short Range
1.	TRAJECTORY:		
	Range	1847.6 km. (1537.6 n.mi.)*	555.6 km. (300 n.mi.)
	Altitude	661.2 km. (410.6 mi.)	151.5 km. (94.1 mi.)
2.	CPE	1500 m.	Less than 1500 m.
3.	PAYLOAD (Warhead and Adaption Kit)	1575 #160	1575 #160
4.	DIMENSIONS:		
	Length	60'	60'
	Diameter	105"	105"
5.	THRUST (Sea Level)	150,000 #	150,000 #
6.	WEIGHTS:		
	Total Missile (dry)	10,715 #	10,715 #
	Nose Cone	2,617 #	2,617 #
	LOX	67,645 #	67,645 #
	Fuel (RP-1)	30,209 #	30,209 #
	Missile at Ignition	108,804 #**	108,804 #**
	Missile at Liftoff	108,231 #	108,231 #
7.	TIME: (Seconds)		
	Total	1016.9	486.9
	Maximum Dynamic Pressure (Ascent)	64	64
	Cut-off	157.8	123.7
	Separation (Thrust Unit)	161.8	127.7
	Vernier Cut-off (Av.)	173.8	139.7
	Separation (Nose Cone)	339.3	305.2
	Zenith	550	265.88
	Reentry (100 kilometers assumed)	950.5	371.5
	Maximum Dynamic Pressure (Descent)	980	440
	Impact	1016.9	486.9
8.	SPEED: (Mach)		
	Cut-off	13.04	6.33
	Reentry	15.45	6.25
	Impact	0.49	0.49
9.	ACCELERATION, MAX.	13.69g	5.2g
10.	DECELERATION, MAX.	44.0g	12.0g
11.	WARHEADS	Nuclear	Nuclear
12.	FUZING	Proximity & Impact	
13.	GUIDANCE SYSTEM	Inertial	Inertial

* - Based on firing due West (maximum possible range under most adverse conditions)
** - Figure includes other materials such as lubricant oils and coolants.

NOTE: The above data have been taken from calculations based on assumed parameters for Block I and Block II missiles.

This document supersedes and replaces JUPITER Missile Fact Sheet dtd 1 Aug 1959. 15 December 1959
Copy 55 of 150 copies, Ser.A

[redacted]

ATC C 14119

C 225436

[redacted]

JUPITER MISSILE FACT SHEET

F U E L S

	LOX (99.5%)	RP-1*
MOLECULAR WEIGHT	32.0	165-190/
FREEZING POINT	-361.8°F	Av. -54.5°F
BOILING POINT	-297.4°F	365-525°F
DENSITY (gr/cc at 68°F)	1.142**	0.801-0.803
COLOR	Light Blue	Colorless to very pale yellow
ODOR	None	Typical Petroleum
TOXICITY:		
Inhalation	None	Mild
Contact	None	Mild
CORROSIVENESS	Non-corrosive	Very Mild
EXPLOSIVE LIMIT IN AIR	Non-explosive	
HANDLING HAZARD	High	Low
COMMERCIAL AVAILABILITY	Plentiful	Plentiful

* --RP-1 is a kerosene-type fuel consisting primarily of aliphatic hydrocarbons.

** - Density computed at boiling point (-297.4°F).

[redacted]

[redacted]

TAB C

OPERATIONS CONCEPT

1. OPERATIONAL OBJECTIVES

Operational objectives for the Jupiter missile will include a 15-minute reaction (countdown) time, the capability of maintaining the entire force in a T-15 minute readiness condition over an indefinite period of time, and the capability of salvo-launching the entire force. (S)

2. OPERATIONAL CHARACTERISTICS

The Jupiter Missile Squadron programmed for Turkey is equipped with 15 missiles deployed at five launch positions of three emplacements each. Each emplacement contains one missile and necessary GSE to fire the missile. All three missiles at a launch position will be controlled through and fired from one launch control trailer. (S)

3. SQUADRON ACTIVATION AND DEPLOYMENT

The Jupiter Squadron programmed for deployment to Turkey will be manned initially by USAF personnel. This unit is identified in USAF Programming Documents as the 866th Technical Training Squadron. Upon deployment to Turkey the unit will be redesignated the 7231st Technical Training Group, composed of a Headquarters Unit, a Technical Training Squadron, a Maintenance Squadron, a Support Squadron and a Dispensary. As USAF personnel in these organizations are replaced by TAF personnel, the U. S. contingent will be reduced to only those personnel required to perform continuing warhead maintenance, custody and related support functions. (S)

[redacted]

[redacted]

TAB F

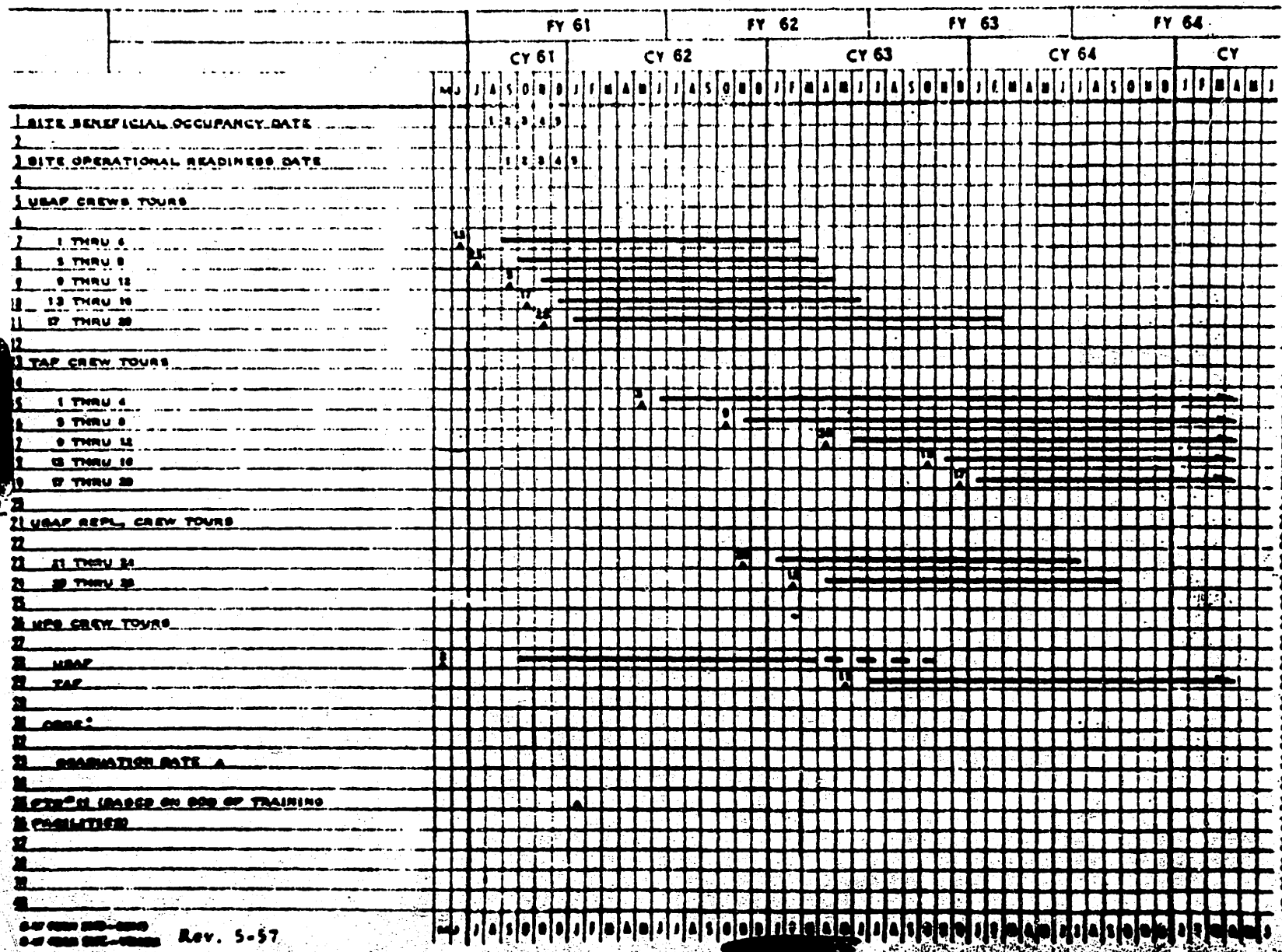
DEPLOYMENT SCHEDULE

Deploy. Sched

[redacted]

PROGRAM SCHEDULE C.T.I.O

DEPLOYMENT SCHEDULE AND TOUR OF SM-75 UNITS TO TURKEY



Rev. 5-57